

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A process for preparing an aromatic diisocyanate by reacting a phosgene with a diamine in the gas phase, wherein the reaction is carried out in a reaction zone in which the pressure is more than 3 bar and less than 20 bar and the temperature in the reaction zone is from more than 200°C to less than 600°C.

Claim 2 (Previously Presented): A process as claimed in claim 1, wherein the temperature in the reaction zone is below the boiling point of said diamine under the pressure conditions prevailing in the reaction zone.

Claim 3 (Previously Presented): A process as claimed in claim 1, wherein an inert medium is fed into the reaction zone in addition to said diamine and said phosgene in such an amount that the concentration of inert medium at the outlet from the reaction zone is more than 25 mol/m³.

Claim 4 (Previously Presented): A process as claimed in claim 1, wherein the concentration of said phosgene in the reaction gas at the outlet from the reaction zone is more than 25 mol/m³.

Claim 5 (Previously Presented): A process as claimed in claim 1, wherein said process is carried out continuously.

Claim 6 (Previously Presented): A process as claimed in claim 1, wherein said process is carried out in a production plant wherein the phosgene holdup in the reaction zone for the reaction of said diamine with said phosgene in the plant is less than 100 kg.

Claim 7 (Withdrawn): A production plant for preparing aromatic an diisocyanate by reacting a phosgene with a diamine in the gas phase at a pressure of more than 3 bar and less than 20 bar, wherein said production plant has a ratio of production capacity to phosgene holdup of more than 3200 metric tons of diisocyanate per year/kilogram of phosgene.

Claim 8 (Withdrawn): A production plant as claimed in claim 7 having a production capacity of more than 50 000 metric tons of diisocyanate per year.

Claim 9 (New): A process as claimed in claim 1, wherein the pressure is from 3.5 bar to 15 bar.

Claim 10 (New): A process as claimed in claim 1, wherein the pressure is from 4 bar to 12 bar.

Claim 11 (New): A process as claimed in claim 1, wherein the pressure is from 5 bar to 12 bar.

Claim 12 (New): A process as claimed in claim 1, wherein the phosgene and diamine reactants are fed through feed lines to a mixing device and then mixed in said device, followed by feeding the reactants to the reaction zone, and wherein the pressure in said feed lines is from 20 to 1000 mbar higher than the pressure in the reaction zone.

Claim 13 (New): A process as claimed in claim 12, wherein the pressure in said feed lines is from 30 to 200 mbar higher than the pressure in the reaction zone.

Claim 14 (New): A process as claimed in claim 1, wherein products leaving the reaction zone are fed to a work-up apparatus having a pressure that is from 50 to 500 mbar lower than the pressure in the reaction zone.

Claim 15 (New): A process as claimed in claim 14, wherein the pressure in said work-up apparatus is from 80 to 150 mbar lower than the pressure in the reaction zone.